## THAT WHICH IS CLAIMED IS:

- 1. Signal amplification circuit (1), the circuit comprising a differential structure amplifier (5) comprising two inputs (8, 9), a first (8) and a second (9), a reference voltage being applied to the first input, and the signal to be amplified being applied to the second input, the two inputs being connected to each other through a biasing resistance (10), the circuit being characterized in that the first input (8) is also coupled to the second input (9) through a signal resistance (3) through which a current passes, the variations of which are representative of the signal to be amplified.
  - Circuit (1) according to claim 1, characterized in that the signal resistance (3) is a pull-up resistance (3) initializing the operating position of a microphone (2), the second input (9) of the amplifier (5) being designed to be connected to an output (4) from microphone (2).
  - 3. Circuit (1) according to claim 1, characterized in that it comprises an impedance matching stage (11) comprising an input (12) and an output (13), the reference voltage being applied to the input (12) and the output (13) forming the first input (8) to the differential structure amplifier (5).
    - 4. Process for neutralizing noise in an electret microphone (2) power supply voltage, an output signal from the microphone (2) being represented by variations in a current passing through a pull-up

5 resistance (3) initializing the operating position of the microphone (2), the said power supply voltage being applied to this pull-up resistance (3), the process consisting of coupling a first terminal (4) of the pull-up resistance (3) firstly to the output from the microphone and secondly to a second input (9) to a differential structure amplifier (5) and coupling a second terminal of the said pull-up resistance (3) to a first input (8) to the differential structure amplifier (5).

DODAY